

Notice of Allowability

Application No.

09/731,335

Examiner

Irakli Kiknadze

Applicant(s)

THAYER, DALE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/15/2003.
2. ☒ The allowed claim(s) is/are 1-34.
3. ☒ The drawings filed on 06 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

1. In response to the Office Action of June 10, 2003 the Response has been received on September 15, 2003.

Response to Arguments

2. Applicant's arguments, see pages 10 and 11, filed on September 15, 2003, with respect to claim 34 have been fully considered and are persuasive. The rejection of claim 34 has been withdrawn.

Allowable Subject Matter

3. Claims 1-34 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Claims 1-12 are allowed because prior art fails to teach or make obvious an apparatus for acquiring off-axis images of a plurality of regions of interest, comprising: an x-ray detector located to simultaneously receive portions of the beam that have passed through a subset of the plurality of regions of interest, the x-ray detector producing from the received portions of the beam a plurality of discrete images, each of the plurality of discrete images being associated with a region of interest in the subset of the plurality of regions of interest, as claimed.

Claims 13-15 are allowed because prior art fails to teach or make obvious a method for acquiring off-axis X-ray image data for a plurality of regions of interest,

comprising the steps of simultaneously detecting the portion of the beam for the plurality of regions of interest and producing, a plurality of discrete image data, each of the plurality of discrete image data corresponding to each of the regions of interest as claimed.

Claims 16-25 are allowed because prior art fails to teach or make obvious an apparatus for acquiring off-axis X-ray images of a plurality of regions of interest, comprising: a detector located to receive portions of a beam that passes through a subset to simultaneously produce an electronic representation of an image for each region of interest as claimed.

Claims 26-30 are allowed because prior art fails to teach or make obvious an apparatus for acquiring off-axis X-ray images of test objects comprising: a high-resolution detector positioned to receive x-rays that are transmitted through at least two regions of interest of the test object from each of the positions and to produce electronic representations of acquired off-axis images corresponding to the regions of interest as claimed.

Claims 31-33 are allowed because prior art fails to teach or make obvious a method for simultaneously acquiring a plurality of off-axis x-ray images comprising: simultaneously producing electronic representations of acquired off-axis images corresponding to the regions of interest as claimed.

Claim 34 are allowed because prior art fails to teach or make obvious a method for acquiring a plurality of off-axis x-ray images comprising: directing and receiving on a detector X-rays that are transmitted through a first region of interest; directing and

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receiving on the detector x-rays that are transmitted through the second region of interest; and producing electronic representation of acquired off-axis images corresponding to the regions of interest as claimed.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Adams (US Patents 5,583,904 and 5,687,209) and Webber (US Patent 5,668,844) disclose tomosynthesis imaging techniques.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irakli Kiknadze whose telephone number is (703) 305-6464. The examiner can normally be reached on M-F(8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (703) 308-4858. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Irakli Kiknadze
December 8, 2003
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DAVID V. BRUCE
PRIMARY EXAMINER